

REMARKS

The application has been reviewed and revised in light of the Office Action mailed on September 9, 2005. Claims 1-20 are currently pending in the application, with Claims 1, 9 and 14 being in independent form. By this amendment, Claims 1, 9 and 14 have been amended. No new matter or issues have been introduced by this amendment. In view of the remarks to follow, reconsideration and allowance of the claims of this application are respectfully requested.

Rejection of Claims 1, 4-6, 8, 14-17 and 20 under 35 U.S.C. § 102

Claims 1, 4-6, 8, 14-17 and 20 were rejected under 35 U.S.C. § 102(b) as being anticipated by Rozsa (U.S. Patent No. 6,534,771).

Rozsa is directed to a crystal plate assembly for a gamma camera having collimator 14, housing 20, and detector plate assembly 18 having crystal plate assembly 22 and optical window 30. Crystal plate assembly 22 includes scintillation crystals, such as entrance crystal 24 and downstream crystal 26. Column 4, lines 42-45 and FIG. 1.

With respect to independent Claims 1 and 14, Rozsa does not disclose or suggest the recited “a single scintillation crystal...wherein at least one portion of at least one surface of said scintillation crystal yields a substantially different light response function for said generated light energy than at least another portion of said scintillation crystal,” of independent Claims 1 or the recited “providing a single scintillation crystal wherein at least one portion of said scintillation crystal yields a different light response function for light energy generated by said scintillation crystal than at least another portion of said scintillation crystal,” of independent Claim 14.

In contrast, Rozsa describes a scintillation crystal plate assembly having an entrance crystal 24 and a downstream crystal 26. There is no disclosure or suggestion by Rozsa of the scintillation crystal plate assembly having a single scintillation crystal, as recited by Applicant's Claims 1 and 14. Rozsa discloses the use of a gamma camera scintillation crystal plate assembly having a "multi-layer scintillation (crystal plate assembly) 22 which includes scintillation crystals, such as an entrance crystal 24 and a downstream crystal 26." Column 4, lines 42-49. Thus the scintillation crystal in Rozsa requires "two or more scintillation crystals" 24 and 26. See Column 7, lines 5-7. It is respectfully submitted that Rozsa explicitly teaches away from the use of "a scintillation crystal," as recited in Applicant's Claims 1 and 14, because the "use of a single thick crystal would result in a reduction of resolution for the system." Column 5, lines 56-57. Therefore, Rozsa teaches that the thick crystal be "split into two thinner crystals such as the crystals 24 and 26." Column 6, lines 5-11.

Accordingly, independent Claims 1 and 14 are believed to be unanticipated by, and otherwise allowable over Rozsa. Therefore, reconsideration and withdrawal of the rejection is respectfully requested and allowance of independent Claims 1 and 14 is earnestly solicited. Dependent Claims 4-6, 8, 15-17 and 20 depend directly or indirectly from independent Claims 1 and 14, and are therefore patentable for at least the reasons given above for independent Claims 1 and 14.

Rejection of Claims 2, 3, 7, 9-13, 18 and 19 under 35 U.S.C. § 103

Claims 2, 3, 7, 9-13, 18 and 19 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Rozsa in view of Levin et al. (U.S. Patent No. 6,114,703), Thompson (U.S. Patent No. 5,122,667) and/or Majewski et al. (U.S. Patent No. 5,864,141).

It is respectfully submitted that neither the combination of patents cited in the Office Action, or any other evidence of record, establish a *prima facie* case of obviousness.

The teachings of Rozsa were discussed hereinabove.

Levin et al. describes a high resolution scintillation detector with semiconductor readout having an array 10 of coated scintillation crystals 11, each scintillation crystal being encapsulated by photodetector 12. Column 5, lines 44-47.

Thompson describes means for measuring depth interaction of gamma-rays in scintillation crystals in order to improve the spatial resolution of positron imaging systems having discrete crystals 2. See Abstract and FIG. 2.

Majewski et al. describes a high resolution gamma ray imaging device 10 contained in an aluminum housing 12 having a lead screen 14 and holding a collimator 16 in place. A crystal scintillator array 18 is placed on a PMT window 22. Column 3, lines 62-67 – Column 4, line 1. Crystal scintillator array 18 consists of one thousand twenty-four 3x3x10 mm³ crystals. Column 4, lines 17-23.

With respect to dependent Claims 2, 3, 7, 18 and 19, these claims depend directly or indirectly from independent Claims 1 and 14 and therefore include the limitations of independent Claims 1 and 14. Therefore, for at least the same reasons given above for Claims 1 and 14, it is respectfully submitted that Claims 2, 3, 7, 18 and 19 are also believed to be allowable over the cited references. Accordingly, reconsideration and withdrawal of the rejection is respectfully requested and allowance of Claims 2, 3, 7, 18 and 19 is earnestly solicited.

With respect to independent Claim 9 and dependent Claims 10-13, which depend therefrom, Rozsa does not disclose or suggest a single scintillation crystal, as discussed above

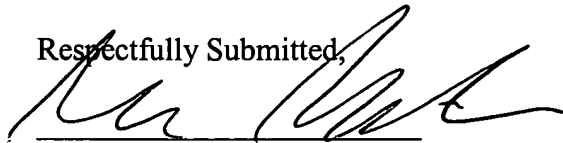
with respect to independent Claims 1 and 14. It is respectfully submitted that Levin et al., Thompson, Majewski et al., or any reasonable combination thereof do not cure the deficiencies of Rozsa as discussed hereinabove.

Accordingly, Claims 2, 3, 7, 9-11, 18 and 19 are believed to be patentably distinct over Rozsa, Levin et al., Thompson, Majewski et al. and any proper combination thereof. Therefore, reconsideration and withdrawal of the rejection is respectfully requested and allowance of all pending claims is earnestly solicited.

Conclusion

In view of the foregoing amendments and remarks, it is respectfully submitted that none of the references of record, considered individually or in combination, in whole or in part, disclose or suggest the claimed subject matter. Therefore, all claims now pending in this application, namely Claims 1-20, are now in condition for allowance. Accordingly, early and favorable consideration of this application is respectfully requested. Should the Examiner believe that a telephone or personal interview may facilitate resolution of any remaining matters, he is respectfully requested to contact Applicant's undersigned attorney at the telephone number indicated below.

Respectfully Submitted,



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